REMARKS

The Office Action dated June 27, 2008, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Status of the Claims

None of the claims have been amended herein. Claims 1-19 are currently pending in the application and are respectfully submitted for consideration.

Improper Finality

The Office Action stated on page 17 that "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a)." However, Applicants did not submit any amendments in the previous Response. Rather, Applicants only submitted arguments in traversing the rejection of claims 1-19 under 35 U.S.C. § 102. In fact, Applicants did not submit a copy of the claims with the previous Response since the claims were not amended.

Applicants note that the section of the MPEP cited by the Office Action states that "second or any subsequent actions on the merits shall be final, **except** where the examiner **introduces a new ground of rejection** that is neither **necessitated by applicant's amendment** of the claims, nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p)" (MPEP § 706.07(a), emphasis added). New reference Goyal et al. was not submitted in an IDS. Further, per the above, no

amendments were made to the claims. Thus, the rejection of claims 1-19 under 35 U.S.C. § 103 in the outstanding Office Action constitutes new grounds of rejection that were not necessitated by Applicants.

Accordingly, because the Office Action introduced a new rejection that was not necessitated by Applicants' amendments to the claims or an IDS, it is respectfully requested that the finality of the outstanding Office Action be withdrawn.

The Office Action also stated on page 17 that "Applicant's arguments filed on 4/17/2008 have been fully considered but they are deemed moot in view of the new grounds of rejections [sic]." However, while Applicants presented arguments on pages 4 and 5 of the previous Response that "determining whether the other network devices have learned the source address when the source address has been learned previously" as recited in independent claim 1 is not disclosed or suggested by Kadambi et al., the Office Action repeated the same grounds of rejection for these features on page 3 of the Office Action, without addressing Applicants' clear traversal.

37 C.F.R. § 1.104(b) mandates that an Office Action must be complete as to all matters. MPEP § 707.07(f) further states that "[i]n order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner **must** provide clear explanations of all actions taken by the examiner during prosecution of an application" (emphasis added). "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it" (*Id.*). "The examiner must address

all arguments which have not already been responded to in the statement of the rejection" (MPEP § 707.07(f), Examiner Note 1).

Per the above, the outstanding Office Action failed to address Applicants' clear traversals. Further, failure to specifically respond to Applicants' arguments renders the Office Action arbitrary and capricious, and therefore invalid under the Administrative Procedure Act (5 U.S.C. § 706), a standard to which all Actions by the USPTO must adhere (see *Dickenson v. Zurko*, 527 U.S. 150 (1999)). For at least these reasons, the finality of the outstanding Office Action is improper.

Accordingly, Applicant respectfully requests that the finality of the outstanding Office Action be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 1-19 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kadambi et al. (U.S. Patent No. 6,560,229) in view of Goyal et al. (U.S. Patent No. 6,466,985). The Office Action took the position on pages 2-16 that the combination of Kadambi et al. and Goyal et al. teaches all of the features of the rejected claims. Applicants respectfully traverse the rejection. Reconsideration of the claims is respectfully requested.

Independent claim 1, from which claims 2-7 depend, recites a method of handling datagrams in a network device coupled to other network devices, including receiving an incoming datagram at a port of the network device, determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram

and a lookup of an address resolution lookup (ARL) table, and performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously. The method also includes writing an entry into the ARL table when the source address has not been learned previously, determining whether the other network devices have learned the source address when the source address has been learned previously, and continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

Independent claim 8, from which claims 9-13 depend, recites a network device coupled to other network devices for handling datagrams, including a plurality of ports for receiving an incoming datagram, an address resolution lookup (ARL) table, and means for determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram. The network device also includes lookup means for performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously, writing means for writing an entry into the ARL table when the source address has not been learned previously, determining means for determining whether the other network devices have learned the source address when the source address has been learned previously, and relaying means for relaying a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

Independent claim 14, from which claims 15-19 depend, recites a network device coupled to other network devices for handling datagrams, including a plurality of ports for receiving an incoming datagram, an address resolution lookup (ARL) table, an egress port determiner for determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram, and an ARL table reader for performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously. The network device also includes an ARL table writer for writing an entry into the ARL table when the source address has not been learned previously, a global address determiner for determining whether the other network devices have learned the source address when the source address has been learned previously, and a learning message forwarder for relaying a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

As will be discussed below, Kadambi et al. and Goyal et al., both individually and in combination, fail to teach or suggest all of the features of the presently pending claims.

Kadambi et al. generally discusses a "switching architecture in an integrated, modular, single chip solution, which can be implemented on a semiconductor substrate such as a silicon chip" (column 1, lines 20-23). A method as discussed in Kadambi et al. may include:

> receiving an incoming packet at a first port, then reading a first packet portion, less than a full packet length, to determine particular packet information. The particular packet information includes a source address and a destination address. The particular packet information is compared to information contained in a lookup table. If a match is made, the packet is modified to include appropriate forwarding and routing information based on the matching entry. The packet is then sent on a communication channel to a selected memory buffer. If there is no match, the particular packet information is learned and placed as a second entry in the lookup table. The packet information is modified to indicate that the packet is to be sent to all ports on the network switch. The packet is then sent to the selected memory buffer. The packet is then retrieved from the selected memory buffer, and sent to appropriate destination ports as indicated in the modified packet information.

(Column 3, lines 17-33).

Goyal et al. generally discusses "a method and apparatus for providing quality of service using the Internet Protocol (IP)" (column 1, lines 17 and 18).

> A packet for the information is generated at a first network device such as an end system. The first network device assigns a flow label to the packet. The flow label indicates that the packet is part of a particular sequence of packets. The first network device also assigns a direction to the packet by, for example, setting a bit in the flow label. The packet is then sent to a second network device (e.g., another end system) through at least one intermediate network device (e.g., a router or switch). This process is continued for the entire sequence of packets for a given flow.

(Column 2, lines 17-26, of Goyal et al.).

Independent claim 1 recites, in part, "determining whether the other network devices have learned the source address when the source address has been learned previously". Independent claims 8 and 14, which each have their own scope, recite similar features. The Office Action took the position on page 3 that column 3, lines 15-30, of Kadambi et al. disclose these features. Applicants respectfully disagree.

The cited section of Kadambi et al. discusses that "[t]he particular packet information includes a source address and a destination address" (column 3, lines 19-21). However, while packets in Kadambi et al. may contain a source address, nothing is cited or found in Kadambi et al. that teaches or suggests that it may be determined whether **other network devices have learned the source address**, as claimed. By way of example, the present specification discusses that, in some embodiments:

> After the destination address lookup, the receiving port will also perform a source address lookup. This procedure is performed so that the network device can learn the port/ MAC address mapping relationship. If the source address lookup fails, that implies that the source address has not yet been learned. The receiving port will then update the Address Resolution Lookup (ARL) table with this source address and receiving port number. Therefore, later on, if another port receives a frame with a destination address equal to this source address, the other port will know the destination port. If the source address lookup produces a match, the receiving port will update the hit bit of that entry. The hit bit is used for aging purposes and is not discussed in detail herein. After the source address is learned, the receiving port will send a frame to the other linked network devices, so that other network devices can also learn this MAC address.

(See, for example, paragraph [0025]). In other words, the source address itself may be used to determine whether a source address has been learned by other network devices. In some embodiments, whether the source address has been learned by other network devices is determined by using the source address to perform a source address lookup.

On the other hand, Kadambi et al. merely discusses that a packet contains a source address. There is no determination as to whether other network devices are aware of the source address in Kadambi et al. As such, Kadambi et al.'s mere mention of a source

address is insufficient to teach or suggest the above-recited features of claim 1. Further, nothing is cited or found in Goyal et al. that cures the above deficiencies of Kadambi et al.

Independent claim 1 also recites, in part, "continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address." Independent claims 8 and 14, which each have their own scope, recite similar features. The Office Action conceded on page 3 that Kadambi et al. does not disclose these features. Rather, the Office Action relied on Goyal et al. to cure these deficiencies of Kadambi et al. Applicants respectfully submit that Goyal et al. also fails to teach or suggest these features.

In making the rejection, the Office Action on page 4 copied and pasted column 4, lines 46-67, of Goyal et al. The cited section of Goyal et al. discusses that:

> There are four aspects of constructing a flow: (1) declaring a name; (2) pinning the route, (3) enabling reverse path routing, and (4) assigning attributes (such as QoS). Abstractly, current network nodes maintain two tables, a routing table and a forwarding table. In the case of a traditional router the forwarding table corresponds to the routing cache. On an ATM switch or an MPLS Label Switch Router (LSR), the forwarding table is respectively the Virtual Channel (VC) lookup table or the label lookup table. To support the flows used in the embodiments of the invention, a traditional router would be augmented with an additional forwarding table for mapping flow names to flow state (including the output port), as discussed in more detail with reference to FIG. 2.
>
> A flow request may be interpreted as an implicit request for route pinning. If not, route pinning may be requested subsequently in a separate message. Without route pinning, the entry in the flow cache simply points to the corresponding entry (in the regular cache) for the destination address. When

> route pinning is requested this entry is copied and thus becomes independent of changes in the default destination based route.

(Column 4, lines 46-67). However, there is nothing in the cited section of Goyal et al. that teaches or suggests continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address, as claimed. In fact, the term "source address" does not even appear in the cited section of Goyal et al.

Further, Applicants respectfully submit that the combination of Kadambi et al. and Goyal et al. in the Office Action is an exercise of impermissible hindsight. MPEP § 2142 states that "[t]he tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight **must be avoided** and the legal conclusion **must be reached on the basis of the facts gleaned from the prior art**" (emphasis added). In the present case, the Office Action merely offered the conclusory assertion that it would allegedly have been obvious to combine the claimed features without offering any reasoning gleaned from Kadambi et al. and/or Goyal et al. as to why this would allegedly have been the case. Further, these features clearly come from claim 1 of the present application rather than from the knowledge of one of ordinary skill in the art.

Claims 2-7, 9-13 and 15-19 depend from independent claims 1, 8 or 14 and add further features thereto. Thus, the arguments above with respect to the independent claims also apply to the dependent claims.

Per the above, Kadambi et al. and Goyal et al., both individually and in combination, fail to teach or suggest all of the features of the above-rejected claims under 35 U.S.C. § 103(a). Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Conclusion

For at least the reasons presented above, it is respectfully submitted that claims 1-19, comprising all of the currently pending claims, patentably distinguish over the cited art. Accordingly, it is respectfully requested that the claims be allowed and the application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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